

# **MODIS TECHNICAL TEAM MEETING**

**April 18, 1996**

The MODIS Technical Team Meeting was chaired by Robert Murphy. Present were Harry Montgomery, Steve Ungar, Wayne Esaias, Bill Barnes, David Herring, and Dick Weber.

## **1.0 SCHEDULE OF EVENTS**

<b>April 15</b>	<b>Quarterly Reports due to Barbara Conboy</b>
<b>April 30</b>	<b>MODIS Programmers' Forum at GSFC</b>
<b>April 30</b>	<b>MCST-Science Team Precursor Meeting at GSFC</b>
<b>May 1 - 2</b>	<b>MODIS Software Acceptance Review (tentative dates)</b>
<b>May 1 - 3</b>	<b>MODIS Science Team Meeting at GSFC</b>
<b>May 16 - 17</b>	<b>SWAMP Land Discipline Review</b>
<b>June 11 - 13</b>	<b>Primary Productivity Workshop at GSFC</b>

## **2.0 MINUTES OF THE MEETING**

### **2.1 New MODIS Science Team Members**

According to Murphy, NASA HQ has announced the selection of five new investigations for the MODIS Science Team. They are:

- Bo-Cai Gao (NRL), "Correction of Thin Cirrus Effects & Characterization of Cirrus Radiative Properties from EOS/MODIS Data";
- Eric Vermote (UMD), "A Global Land Surface Reflectance Product for Use in MODIS Land Algorithms";
- John R. G. Townshend (UMD), "Enhanced Land Cover & Land Cover Change Products from MODIS";
- Ranga Myneni (UMD), "Radiative Transfer Based Synergistic MODIS/MISR Algorithm for the Estimation of Global LAI/FPAR"; and
- Janet W. Campbell (UNH), "Development of Algorithms & Strategies for Monitoring Chlorophyll & Primary Productivity in Coastal Ocean, Estuarine & Inland Water Ecosystems".

These five investigations were selected from 35 proposals submitted to NASA HQ in the fall of 1995. The MODIS announcements are the first in a series based upon proposals to the NASA Research Announcement MTPE95-03.

The process of reviewing for other types of EOS investigations, including team membership for other facility instruments and Landsat, Interdisciplinary Investigations, and Young Investigators, is continuing. The results of these reviews will be announced as their review and selection processes are completed.

For further information on the MODIS selection, please contact either Dr. Robert E. Murphy, MODIS Project Scientist, at (301) 286-5324 or at [rmurphy@ltpmail.gsfc.nasa.gov](mailto:rmurphy@ltpmail.gsfc.nasa.gov); or Dr. Diane E. Wickland, MODIS Program Scientist, at (202) 358-0245 or at [dwickland@mtpe.hq.nasa.gov](mailto:dwickland@mtpe.hq.nasa.gov).

## **2.1 MCST Reports**

Montgomery reported that he has been meeting with personnel at Swales to work on  $1/f$  noise in MODIS thermal bands. He pointed out that photoconductive detectors can have high  $1/f$  noise. Montgomery will meet again tomorrow to discuss an algorithm that will compensate for  $1/f$  noise using a piece-wise linear interpolation. He has asked EOS Project to obtain some sample noise data from SBRS so that he may begin characterizing the  $1/f$  noise in MODIS.

Montgomery announced that he plans to meet with Paul Menzel and Otis Brown during the upcoming MODIS Science Team Meeting to talk about strategies for processing photoconductive detector data for Level 1B.

Montgomery plans to travel to SBRS on Tuesday, along with Dr. Che, to discuss the SRCA algorithms. A list of questions for that meeting has already been sent to SBRS.

## **2.2 Solar Diffuser Tests**

Barnes said he attended a teleconference yesterday—which included Phil Slater, Stuart Biggar, Gene Waluschka, and Weber—to discuss the proposed solar calibration test at SBRS. Following their discussion, the group feels that the heliostat mirror should be usable. They expect to locate a “sweet spot” in the reflected sunlight where the illumination is fairly constant. Given this expectation, Weber agrees that SBRS should go ahead and put a window in their clean room so as to enable solar testing without exposing MODIS to increased contamination.

## **2.3 Spacecraft Maneuvers**

According to Barnes, Paul Westmeyer, of GSFC Code 421, stated that EOS Project is seriously considering maneuvering the EOS AM-1 spacecraft in orbit to view cold space. Project may request Brij Gambhir, of SSAI, to produce computer models of how the maneuver will be done.

These latest discussions are focused solely on looking at cold space. However, the lunar view issue can be revisited later. Both require complex maneuvers of the spacecraft.

## **3.0 ACTION ITEMS**

1. *B. Barnes*: Report on SBRS’ revised test plan at the next Technical Team Meeting.

### **3.1 Action Items Carried Forward**

2. *R. Murphy*: Meet with Yoram Kaufman and Harry Montgomery to resolve the band 1 & 2 saturation issue and determine whether it impacts the atmospheric narrow band filter.